

Brunswick Nuclear Plant

Safety Information 2006

Keep this brochure in:

1. your car,
 2. your home, or
 3. a handy place
- so that you will have the
information in an emergency.



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Dear Neighbor:

Progress Energy’s commitment to safety is evident in everything we do at the Brunswick Nuclear Plant, including our extensive security measures and emergency plan. As outlined in this brochure, our emergency plan – developed in cooperation with the state of North Carolina as well as Brunswick and New Hanover counties – contains important information to help you and your family understand what to do in the unlikely event of an emergency at the Brunswick Plant.

We at Progress Energy plan and train with federal, state and county emergency personnel to make sure we are prepared to keep you safe. We also want you to be prepared for your own personal safety. You should know what to do, just as you would know what to do when there is a storm, fire or any other emergency that might affect your safety. I encourage you to review this material and place it in a convenient location for quick access.

If you have questions about the Brunswick Plant emergency plans, please call your county emergency management agency or the Brunswick Plant Visitors Center (numbers are listed in the enclosed material).

At Progress Energy, our top priority is to reliably generate electricity for our customers from a facility that is safe, secure and environmentally friendly. We follow a defense-in-depth strategy to best ensure our employees and the surrounding communities remain safe and secure. After all, the 1,000 people who work at the Brunswick site and their families also live in your community.



Neil Gannon
Vice President, Brunswick Plant

Your Safety is Important to Us

This brochure gives basic information on radiation and instructions on what to do if there is an emergency at the Brunswick Plant. State and county officials and Progress Energy want you to be prepared so that you and your family would know what to do in an emergency.

The Brunswick Plant has multiple backup safety systems, so a serious emergency is unlikely to occur. Plant operations are conducted under strict safety rules and are monitored by the Nuclear Regulatory Commission (NRC), a federal agency that regulates the nuclear industry in the United States. As part of regulatory requirements, emergency exercises are conducted every other year with plant personnel and state and county officials participating. This brochure is part of the comprehensive emergency plans developed by the state of North Carolina, Brunswick and New Hanover counties and Progress Energy.

Be sure you understand the information in this brochure so you, your family and your co-workers will be prepared in the unlikely event of an emergency. Discuss this material with family members and friends.

If you know someone who cannot read or is visually impaired, please read this information to them and make sure they understand it.

The Warning System

In the unlikely event of an emergency at the plant, pole-mounted sirens located in the 10-mile emergency planning zone (EPZ) around the plant would be activated to alert the public.

Hearing the sirens does not mean you should evacuate.

If you hear the sirens and are not sure if it is a test of the system or an emergency, tune to one of the radio stations listed on page 3. If there is an emergency, these stations should stop regular programming to give information and instructions to the public. **The sirens will sound several times for three-minute intervals if there is an emergency that could affect the public.** Keep the radio tuned for more information. You might be advised to shelter in place or to evacuate from the area.

The sirens are activated by state and county officials and are tested often to make sure they work properly. The sounding of the sirens is probably just a test, but there could be an emergency at the plant.

Sirens are the primary warning system used to alert the public in the event of an emergency. Officials might also travel along selected county and state roads in the 10-mile EPZ in emergency vehicles equipped with loudspeakers and sirens. They might also go door-to-door in selected areas. The Coast Guard would assist in alerting boaters on coastal waterways.

Classification of Emergencies

There are four different classifications of emergencies that could occur at a nuclear power plant. The classifications help state and county officials and plant personnel determine how they will respond to each kind of problem.

Unusual Event

This is the least serious of the four emergency classifications. It means there is a problem or a potential problem at the plant, but it would not affect the public. No public action is necessary.

Alert

This is an event that could reduce the level of safety at the plant. There is still no danger to the public. State and county officials and Progress Energy might decide to activate their emergency centers, just in case the situation gets worse. No public action is necessary.

Site Area Emergency

This event could lower the safety of the plant, but probably not enough to pose a danger to the public. Radioactivity levels outside the plant site are not expected to exceed federal guidelines. The sirens will likely be sounded to alert the public to listen to local radio and television stations for information and instructions.

General Emergency

This is the most serious event that could occur at the plant. Plant problems could lead to a release of radioactivity above federal guidelines. State and county officials would take action to protect the public. Sirens would be sounded and local radio and television stations would give instructions to the public living in the affected areas. They would be told to stay indoors or to evacuate from the area.

Some residents in the 10-mile EPZ have been identified as needing special assistance in the event of an emergency. These people should fill out the **Request For Special Assistance** card, which is attached inside this brochure.

Siren Tests

There are three ways the sirens are tested:

Silent test

A silent signal is sent to each siren every week. The sirens do not sound during this test.

Low-volume “growl” test

A very low sound like a growl will occur for a few seconds. Low-volume tests are conducted every three months. Only people very close to a siren will hear this test. Progress Energy will provide information about the test through the local news media.

Full-volume test

All the sirens will sound at the same time for three-minute intervals. A full-volume test is conducted once a year. Progress Energy will provide information about the test through the local news media and will mail postcards to the public living within the 10-mile EPZ.

Occasionally a siren may accidentally sound because of lightning strikes or other problems. If you hear a siren and have a question, call your local county emergency management office listed on page 8.

Taking Shelter in Place

If there is an emergency at the plant, radio or television stations might instruct you to shelter in place as a precaution. Sheltering in place is the best thing to do if air containing radioactive materials were to pass over your area. By remaining indoors, you reduce exposure to the radioactive materials.

You should follow these steps when told to shelter in place:

1. **DO NOT go to your child’s school.** Children will be sheltered and protected by school officials.
2. Shelter livestock and give them STORED feed and water, not fresh. Keep pets indoors.
3. Go indoors and close all windows and doors. Turn off fans, heating and air conditioning that require outside air. Close any other air intakes.
4. Do not use the telephone unless absolutely necessary. It is imperative that phone lines remain available for emergency response use.
5. Cover all open food containers. The food, water and milk supplies in your home are safe to eat and drink.
6. Go to a room or basement with few or no windows.
7. Stay tuned to a local radio or television station for more emergency information.
8. Stay indoors until a local radio or television station reports it is safe to go outside.
9. If you must go outside, place a cloth over your nose and mouth.

Evacuation Procedures

If there is an emergency at the plant, people in some zones might be asked to evacuate as a precautionary measure. Stay calm. You will only be asked to evacuate if it is necessary. Evacuation routes and evacuation shelters for each zone are listed on pages 8-10.

What You Should Do

1. Pack necessary items such as the following to take with you:
 - this brochure
 - two sets of clothing, two blankets or a sleeping bag for each person planning to stay at the evacuation shelter
 - toilet articles, bath towels

- necessary medication, baby needs
 - identification, car registration
 - credit cards, checkbook, cash
 - portable radio, flashlight, batteries
2. Do not take pets with you if you plan to stay at the evacuation shelter. All pets and livestock should be sheltered. Leave them a three-day supply of stored food and water.
 3. Do not use the telephone unless absolutely necessary.
 4. Plan ahead! It is a good idea to drive your evacuation route now so that you are familiar with it. Call your local county emergency management office if you have questions. The telephone numbers for state and county emergency management agencies are listed on page 12.

As You Evacuate

1. If your child attends a school in the 10-mile EPZ, **do not go to the school**. Children in these schools will be taken by bus to relocation schools (listed on page 10).

School children who live in the 10-mile EPZ and attend a school outside the EPZ will be kept at their schools by school officials until they are picked up by their parents.
2. Close car windows and vents. Do not turn on the car air conditioner or heater.
3. **As you drive, stay tuned to a local radio station for more information.**
4. Follow the evacuation route to the designated evacuation shelter for the area where you live or the relocation school for your child’s school. You may stay at the evacuation shelter or another location at least 10 miles away from the plant. It is very important that you sign in at the evacuation shelter even if you do not plan to stay there.

Radiation

We are constantly exposed to radiation from our natural environment. This is called background radiation. Sources of background radiation include the sun, the air we breathe, soil, plants, building materials and even the human body. We are also exposed to man-made sources of radiation like medical and dental X-rays, smoke detectors and television sets.

You could be exposed to radioactive materials in three ways:

- Radioactive material in the air and on the ground. You can prevent exposure by going to a place with no radioactive material.
- Radioactive material on hair, skin and clothing. Exposure will stop if you wash off the radioactive material.
- Breathing or swallowing radioactive material. Exposure will stop when the material stops giving off radiation or when your body eliminates it.

Radio Stations

These radio stations will participate in Emergency Alert System (EAS) announcements in the event of an emergency.

If you hear several three-minute-long siren blasts, tune to one of the following stations for information:

97.3 FM	WMNX
98.7 FM	WKOO

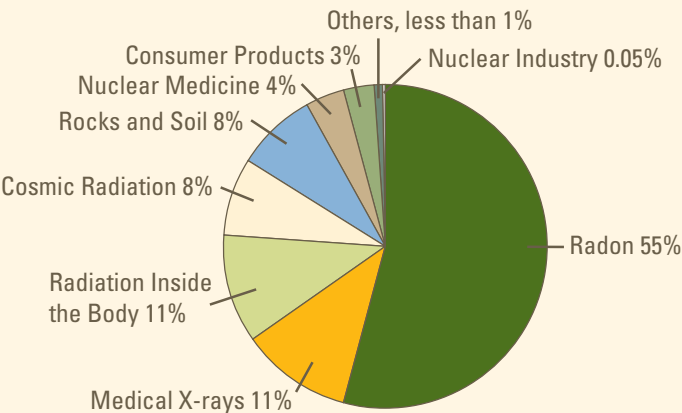
Other radio and television stations may also broadcast information and instructions in an emergency.

If an evacuation of coastal waters is ordered, the U.S. Coast Guard will broadcast information and instructions on the following frequencies:

U.S. Coast Guard Radio

Band	Channel	Frequency
VHF-FM	16	156.8 MHz
HF		2182.0 kHz

Sources of Radiation Exposure



Measured in millirem (mR) per year

Special Assistance

Special plans have been made for people identified as needing special assistance. The Request For Special Assistance card helps county officials know if you need assistance. Even if you have previously submitted a request card, the information must be updated every year, so please fill out this card and mail it as soon as possible. This information will be handled by county emergency management officials in a confidential manner.

You should fill out the special assistance card if:

- You are disabled or hearing impaired. Your county officials will keep this information on file and will be able to assist you if needed.
- You do not have a car, or cannot ride with someone else. County officials can make arrangements for your transportation. These plans will be broadcast on local radio and television stations. Fill out the attached postcard, or have someone else complete it for you and mail it in.

If you are responsible for someone in a nursing home, rest home or hospital, do not pick them up. Officials will care for these people and take those needing medical care to hospitals and special care facilities outside the 10-mile area surrounding the plant.

If you have neighbors with special needs, you may want to help them shelter in place in their home or to evacuate.

Sources and amounts of natural background radiation

Radon	200 mR
Cosmic radiation	27 mR
Internal radiation from human body	40 mR
Rocks and soil	28 mR

Sources and amounts of man-made radiation

Medical X-rays	39 mR
Nuclear medicine	14 mR
Consumer products (TVs, smoke detectors, etc.)	10 mR
Other (including nuclear power)	2 mR

Total	360 mR
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Potassium Iodide

In cases where the public may be exposed to certain types of radioactivity, state and local health officials may advise you to take Potassium Iodide (KI) tablets.

KI is an over-the-counter drug that may reduce the amount of radioactive iodine absorbed by the body’s thyroid gland. KI saturates a person’s thyroid with iodine so that it cannot absorb any radioactive iodine.

The public should only take KI when directed to do so by public health officials. Evacuating the area or staying inside, based on directions given by state and county officials, is the best protective action to take in the unlikely event of a radioactivity release from the Brunswick Plant.

KI would be available at the relocation facilities and is available for school children and staffs at schools within the 10-mile EPZ.

If members of the public who live within 10 miles of the plant would prefer to have KI on hand, it can be picked up at the following locations:

New Hanover County Health Department 910.343.6500
Brunswick County Health Department 910.253.2250
1.888.428.4429

For more information on KI, you can visit the North Carolina Public Health Web site at www.ncpublichealth.com/ki.htm or call 919.733.9190.

Agricultural Information

If you are warned that a radiological emergency exists, make arrangements for the safety of your family and farm.

For the farm:

- Shelter all farm animals, particularly dairy cattle and dairy goats.
- Livestock should only be fed stored feed and protected water.
- Bring feed into buildings or cover outdoor feed supplies.
- Store as much water as possible for livestock. Cover wells, rain barrels and tanks.

For the family:

- Place food and water inside a closed area in your house where it cannot be contaminated. Uncovered food brought in from a contaminated area should be cleaned.
- Eggs, potatoes and melons that are cleaned may be eaten.
- Green leafy vegetables should be carefully washed. Remove the outer layers if they were exposed to contamination.
- Peas and beans require normal cleaning.
- Wash hands thoroughly before eating.

For farm work:

- Wear protective clothing (similar to that used for pesticide application) when working outdoors for the first few days following the emergency. Remove outer clothing before entering your home or any other clean area. Shower thoroughly as soon as you finish work.
- Wear a dust filter over your nose and mouth when cultivating dry earth or if harvesting corn or feed grains.

There are three types of radiation:

Alpha

The least penetrating, it can be stopped by a piece of paper.

Beta

It can be stopped by a thin piece of aluminum.

Gamma

It can be stopped by lead, water or concrete.

Brunswick Plant Visitors Center

Come explore the world of energy at the Brunswick Plant Visitors Center, located two miles north of Southport. Interactive exhibits, graphic displays and videos will enlighten and entertain people of all ages. You and your family will have a better understanding of nuclear power and other energy sources used in our world today.

- Learn more about nuclear fuel by examining a model of a fuel bundle. You can also learn about the Brunswick Plant's unique construction through graphics and a cutaway section of a containment wall like the one surrounding the reactor vessel.
- View the scale model of the plant to learn how electricity is generated at a nuclear plant.
- Ride our energy bikes and use your own muscle power to operate various household appliances.
- Learn about natural and man-made sources of radiation and use a Geiger counter to measure amounts of radioactivity in various objects.
- Step inside a model of the Brunswick Plant control room.
- Discover the many wonders to be found in coastal Brunswick County.

Groups are welcome and should make advance reservations as early as possible. Come visit and have fun while learning. A picnic area is adjacent to the center and is available to the public. For further information, call 910.457.6041.

Hours:

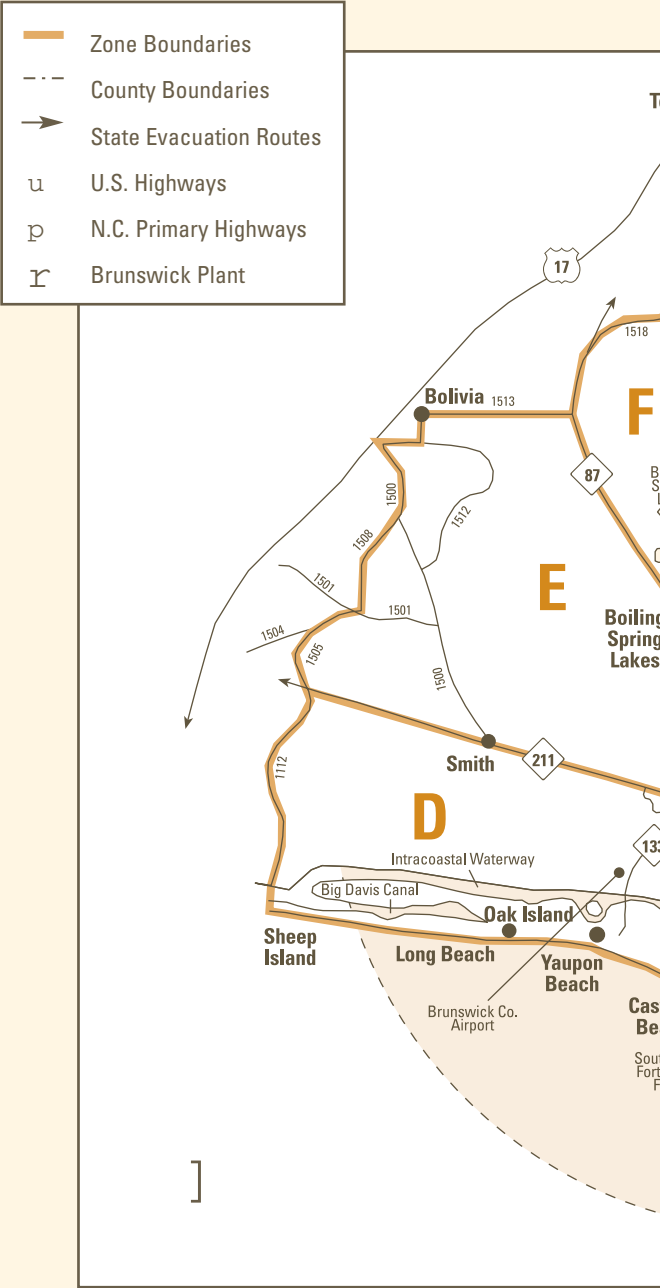
Visitation hours vary – call 910.457.2418 or 910.457.2900. Closed on holidays and weekends. Admission is free.

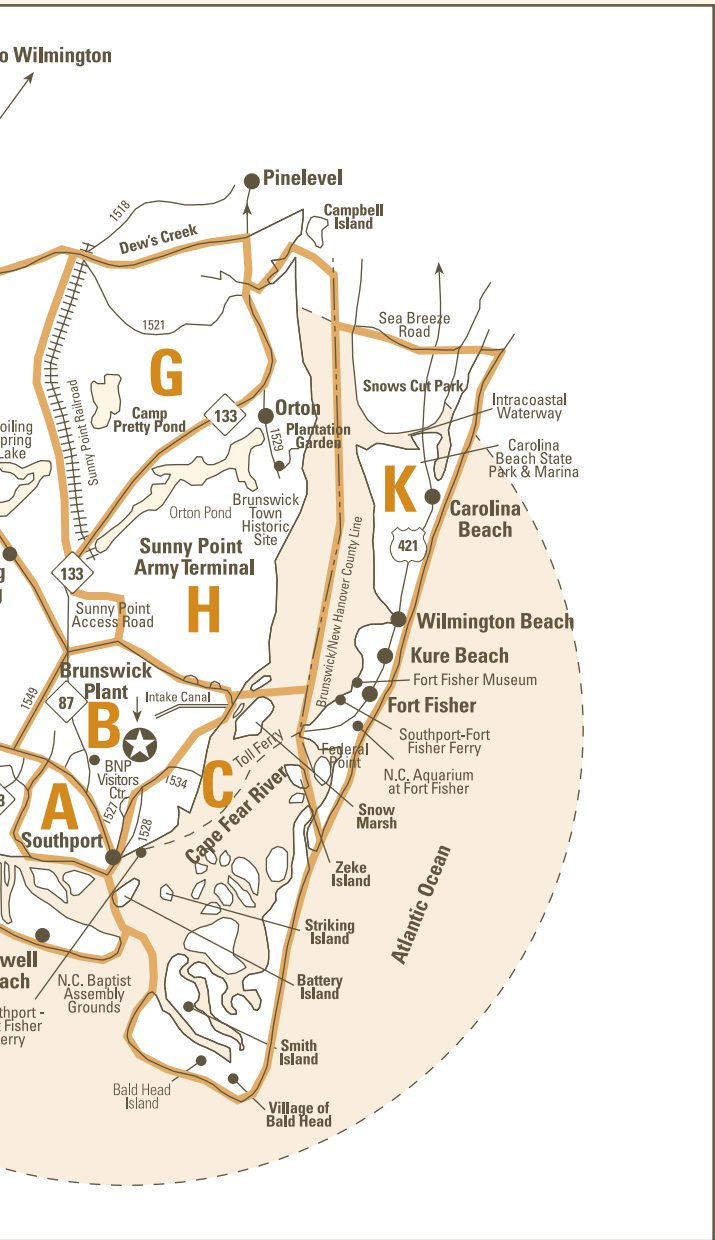
Directions:

- From US 17, take the Southport/Oak Island exit. Follow NC 133 beyond where NC 133 merges with NC 87. Follow NC 87 approximately three miles to the Visitors Center on the left.
- From US 211, go to the stoplight at the intersection of NC 87 in Southport. Turn left and go approximately 2/10 mile. The Visitors Center is on the right.

Map of the 10-Mile Area Around the Brunswick Plant

The map is divided into zones. Each zone is marked with a different letter. If the radio or television station tells you to evacuate, the information on the following pages tells you where to go to be safe. Look at the evacuation route for your zone. Mark the route on the map now so you will have it if you need it.





Zone	Evacuation Shelter
A	North Brunswick High School
B	North Brunswick High School
C	North Brunswick High School
D	West Brunswick High School
E	West Brunswick High School
F	North Brunswick High School
G	North Brunswick High School
H	North Brunswick High School
K	Trask Coliseum at UNC-W Roland Grise Jr. High School* Hoggard High School* Alderman Elementary School*

*These three shelters are available on days school is not in session.

Zone		Evacuation Routes and Shelters	
Zone	Description of Zone	Evacuation Routes	Evacuation Shelter
A	The zone is bordered on the north by NC 211; on the east by NC 211 and NC 87/211 (Howe St.) to the end of that road in Southport. The zone travels south along the north shore of the Intracoastal Waterway and on the west by the Brunswick Plant discharge canal.	NC 87 north, NC 133 north, SR 1437 (Old Fayetteville Rd.) west.	North Brunswick High School
B	The zone is bordered on the north by Sunny Point Access Road; on the northeast by the southern border of Sunny Point Military Ocean Terminal; on the east by the Cape Fear River, then by SR 1528 and SR 1527 (Leonard St.); on the south by the intersection of NC 87/211 and Leonard St.; on the south-west by NC 211 and NC 87/211; and on the west by SR 1549.	NC 87 north, US 17 bypass north, SR 1437 (Old Fayetteville Rd.) west.	North Brunswick High School
C	The zone is bordered on the north by the southern tip of Sunny Point Military Ocean Terminal and the north end of Snow Marsh to the Brunswick/New Hanover county line (in the Cape Fear River); on the east by the New Hanover county line to the Atlantic Ocean. The boundary travels south, then west around the south shore of Bald Head Island and north to the eastern tip of Oak Island. The zone continues north around the west shore of Battery Island to the end of NC 87/211 (Howe St.) in Southport. The zone is bordered on the west by SR 1527 (Leonard St.) and SR 1528 to the Brunswick Plant's water intake canal. The zone travels east following the intake canal to the Cape Fear River, then travels north to the southern tip of the Sunny Point Military Ocean Terminal boundary. The zone includes Snow Marsh and Zeke, Battery, Striking, Smith and Bald Head islands.	NC 133 north, SR 1437 (Old Fayetteville Rd.) west.	North Brunswick High School

		Evacuation Routes and Shelters	
Zone	Description of Zone	Evacuation Routes	Evacuation Shelter
D	The zone is bordered on the north by NC 211; and on the east by the Brunswick Plant discharge canal to the Intracoastal Waterway. The zone follows the north shore of the Intracoastal Waterway to the intersection of Howe St., then south to the N.C. Baptist Assembly east shore. The zone is bordered by the Atlantic Ocean on the south to Sheep Island on the west, then north on SR 1112.	NC 211 west, US 17 bypass south, NC 130 west.	West Brunswick High School
E	The zone is bordered on the north by the southern Bolivia town limits and by SR 1513; on the east by NC 87 and SR 1549; on the south by NC 211; on the west by SR 1505, 1504, 1508, 1500 and US 17 to the southern Bolivia town limits.	SR 1500 north, SR 1502 north (Old Hwy. 17 north), SR 1401, US 17 bypass south, NC 130 west.	West Brunswick High School
F	The zone is bordered on the north by SR 1518; on the east by the Sunny Point Railroad and Sunny Point Military Ocean Terminal; on the south by Sunny Point Access Road; and on the west by NC 87.	NC 87 north, US 17 bypass north, SR 1437 (Old Fayetteville Rd.) west.	North Brunswick High School
G	The zone is bordered on the north by a line extending east from the intersection of SR 1518 and SR 1521 along Dew's Creek to NC 133 about one mile south of Pinelevel; on the east by NC 133; on the south by the intersection of NC 133 and the Sunny Point Railroad; and on the west by the Sunny Point Railroad. The zone includes Girl Scout Camp Pretty Pond.	NC 133 north, SR 1437 (Old Fayetteville Rd.) west.	North Brunswick High School

Evacuation Routes and Shelters

Zone	Description of Zone	Evacuation Routes	Evacuation Shelter
H	The northern border of the zone extends east from the intersection of SR 1521 and NC 133 to the Brunswick/New Hanover county line (centered in the Cape Fear River) just south of Campbell Island. The zone is bordered on the east by the Brunswick/New Hanover county line (centered in the Cape Fear River); on the south by the north end of Snow Marsh and the southern boundary of Sunny Point Military Ocean Terminal. The zone follows the southern boundary to the Sunny Point Railroad to its intersection with NC 133, and is bordered on the west by NC 133. The zone includes the Sunny Point Military Ocean Terminal, Orton Plantation and Old Brunswick Town.	NC 133 north, SR 1437 (Old Fayetteville Rd.) west.	North Brunswick High School
K	The zone is bordered on the north by Sea Breeze Road, extending west across US 421 to the New Hanover/ Brunswick county line (centered in the Cape Fear River). The zone is bordered on the east by the Atlantic Ocean, and on the west by the New Hanover/Brunswick county line to a point just south of Federal Point. The zone includes Sea Breeze, Carolina Beach, Wilmington Beach, Kure Beach, Fort Fisher and Federal Point.	Dow Road, US 421 north, NC 132 north.	Trask Coliseum at UNC-W Roland Grise Jr. High School* Hoggard High School* Alderman Elementary School* <i>*These three shelters are available on days school is not in session.</i>

School & Location

Zone on Map

Relocation School

Southport Elementary School (Southport)	A (Brunswick County)	Supply Elementary (Supply) 51 Benton Road, SE
The Brunswick Learning Center Baby's Learning Center (Southport)	A (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only) Business 17 Bolivia 1 mile north of government complex
Day Care Center for Tiny Tots (Southport)	A (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
Wee-Care Day Care (Southport)	A (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
Apostolic Christian Academy (Southport)	A (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
Southport Baptist Church Preschool (Southport)	A (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
Little Sandpipers II (Southport)	A (Brunswick County)	Little Sandpipers I (Supply) (Pick-up point only) Business 17 Supply 0.5 mile south of Brunswick Community College
Southport Christian School (Southport)	B (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
L&L Montessori (Southport)	B (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
Childcare Network (Southport)	C (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
South Brunswick Middle School (Boiling Spring Lakes)	F (Brunswick County)	Leland Middle School (Leland) 0.5 miles south of North Brunswick High School
South Brunswick High School (Boiling Spring Lakes)	F (Brunswick County)	Leland Middle School (Leland) 0.5 miles south of North Brunswick High School
Carolina Beach Elementary School (Carolina Beach)	K (New Hanover County)	Bellamy Elementary School (Wilmington) (Pick-up point only) US 421 north, left on Saunders Rd.
Discovery Days (Carolina Beach)	K (New Hanover County)	Bellamy Elementary School (Wilmington) (Pick-up point only)
Little Footprint (Baptist Assembly)	D (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)
Kids World (Southport)	A (Brunswick County)	Bolivia Elementary School (Bolivia) (Pick-up point only)

Current as of August 2005

Relocation Schools for Licensed
Day Care Centers and Schools

If there is an evacuation while children are in school, **DO NOT GO TO THEIR SCHOOL.** School children within the 10-mile emergency planning zone (EPZ) will be taken by school officials to one of the relocation schools listed in this chart. School children who live in the 10-mile EPZ and attend a school outside the EPZ will be kept at their schools by school officials until they are picked up by their parents.

Look at the chart in the column under “School & Location” and find your child’s school. The next column over shows the zone on the map in which the school is located. The last column lists the relocation school for each school in the 10-mile area around the plant. When you have determined the designated relocation school for your child’s school, you may do one of the following:

1. You may pick up your child at the relocation school and go and stay at the evacuation shelter for your zone.
2. You may pick up your child at the relocation school and go and stay somewhere other than the evacuation shelter, as long as you are 10 miles from the plant.

Your child will be cared for at the relocation school by school and county officials until you arrive.

Brunswick Plant Construction

The Brunswick Plant is constructed with thick layers of concrete and steel, backed up by multiple safety systems. Its sturdy structure is built to withstand hurricanes, earthquakes, tornadoes and other tremendous forces.

License Renewal

Progress Energy is currently applying through the U.S. Nuclear Regulatory Commission for a 20-year extension to the Brunswick Plant's operating licenses. The process to renew these licenses is rigorous and thorough. Obtaining extended operating licenses will result in long-term benefits for the community while allowing Progress Energy to provide much needed electricity to the region through 2036.

For More Information

If you have questions about any of the safety information you have read in this brochure, you can call or write one of the following offices:

Brunswick County 910.253.2565
Emergency Management Agency 910.253.4376
3325 Old Ocean Highway or 1.800.522.2366
P.O. Box 9 (NC only)
Bolivia, NC 28422

New Hanover County
Department of Emergency 910.341.4300
Management or Disaster
Information Recording 910.341.4123
20 N. 4th St.
P.O. Box 1525
Wilmington, NC 28402-1525

N.C. Emergency Management 919.733.3867
State Emergency Operations Center 1.800.858.0368
4713 Mail Service Center
Raleigh, NC 27699-4713

Brunswick Plant Visitors Center 910.457.6041
P.O. Box 10488
Southport, NC 28461-0488

U.S. Coast Guard Group 252.247.4570
P.O. Box 237
Atlantic Beach, NC 28512-0237

The Brunswick Plant

The Brunswick Plant, home of two nuclear reactors, generates enough electricity to power approximately 1 million homes. That equates to providing electrical energy to about 25 percent of Progress Energy's 1.2 million customers located in North Carolina and South Carolina. Each of the Brunswick reactors is refueled once every 24 months, usually in the spring when the demand for electricity is relatively low.

The power plant uses uranium as fuel to heat water, changing it to steam (see diagram on this page). Water is pumped through the reactor core where a controlled nuclear reaction releases heat. The water inside the reactor vessel boils into superheated steam, which is directed against turbine blades to make the turbine and electric generator spin at 1,800 revolutions per minute, producing electricity.

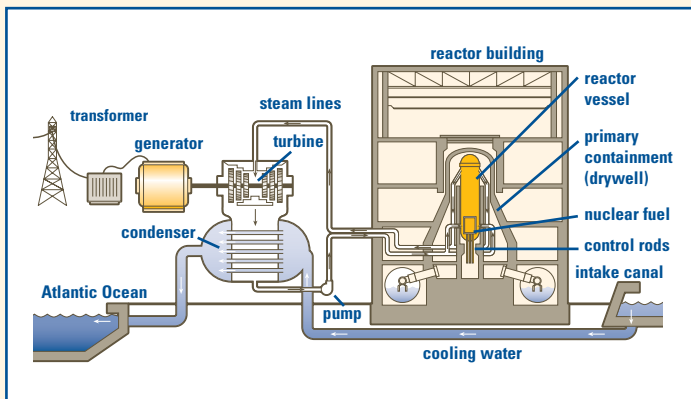
After passing through the turbine, the steam passes through a condenser where it is cooled by water drawn from the Cape Fear River, converting it back into a liquid state that is then

reheated and turned to steam again. This plant water does not mix with the river water and is contained within the reactor building.

The foam present in the outflow canal is formed just like ocean waves create beach foam. At the Brunswick Plant, 1 million gallons of water per minute is pumped from the Cape Fear River where it passes through the plant's cooling system and then drops approximately 15 feet to the head of the outflow canal. It is the churning action, like a wave crashing on the beach, that creates the foam. The lower Cape Fear River contains naturally high levels of sediment that causes the brown appearance of the foam floating in the outflow canal.

After the river water exits the plant, it flows down a five and a half mile outflow canal and is pumped 2,000 feet into the Atlantic Ocean, where tides and currents rapidly dissipate the warmed water.

Due to world events, people sometimes have questions about security. The Brunswick Plant has always had 24-hour security personnel and protection. We have also made significant enhancements in security since Sept. 11, 2001, including adding more physical barriers and technology, hiring additional armed security officers, and improving our collaboration with the U.S. military, FBI, Department of Homeland Security, and state/local law enforcement. The Brunswick Plant is considered one of the safest and most secure industrial sites in the country.



For more information about the Brunswick Plant and nuclear power, contact Progress Energy at 910.457.6041 or visit progress-energy.com.

Nuclear Energy Related Web Sites

www.nei.org

www.energy.gov

www.nrc.gov

www.howstuffworks.com

www.aboutnuclear.org

www.iaea.org

www.ans.org

JULY2006						
S	M	T	W	T	F	S
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2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23 <small>7/30</small>	24 <small>7/31</small>	25	26	27	28	29

AUGUST2006						
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20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER2006						
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER2006						
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER2006						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER2006						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24 <small>12/31</small>	25	26	27	28	29	30

= Low-Volume/Growl Test Dates

= Full-Volume Siren Test Date

Siren test dates subject to change.

Your Quick Reference of Safety Information for the Brunswick Plant

Please take a minute and complete the information below so you will have it in an emergency.

My local radio station is:

My local television station with information is:

My zone on the map is:

The evacuation shelter for the zone where I live is:

The evacuation route for the zone where I live is:

The relocation school (s) for my child (children) is (are):

Children in School

If your children attend schools within the 10-mile emergency planning zone, please do not try to pick them up. The schools will follow their own evacuation procedures. See page 11 for more information about school relocations.

For More Information

If you need help during an evacuation, call the number for the county you live in:

- Brunswick County910.253.2565910.253.4376
- New Hanover County910.341.4300

Radio Stations

These radio stations will participate in Emergency Alert System (EAS) announcements in the event of an emergency.

If you hear several three-minute-long siren blasts, tune to one of the following stations for information:

- 97.3 FMWMNX
- 98.7 FMWK00

Other radio and television stations may also broadcast information and instructions in an emergency.

U.S. Coast Guard Radio

Band	Channel	Frequency
VHF-FM	16	156.8 MHz
HF		2182.0 kHz

Siren Test

Sirens are tested three ways. See the calendar for dates the low-volume and full-volume tests of the sirens will be conducted.

Inadvertent Siren Activation

Occasionally a siren may accidentally sound because of lightning strikes or other problems. If you hear a siren or have a question, call your local county emergency management office (listed above).

JANUARY2006						
S	M	T	W	T	F	S
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FEBRUARY2006						
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26	27	28				

MARCH2006						
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26	27	28	29	30	31	

APRIL2006						
S	M	T	W	T	F	S
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23 _{7/30}	24	25	26	27	28	29

MAY2006						
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7	8	9	10	11	12	13
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21	22	23	24	25	26	27
28	29	30	31			

JUNE2006						
S	M	T	W	T	F	S
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4	5	6	7	8	9	10
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25	26	27	28	29	30	



Progress Energy

Brunswick Plant Emergency Preparedness
PO Box 10429
Southport, NC 28461